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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/342,453	06/29/1999	EDGAR J. ST. PIERRE	E0295/7100/R	6555
7590 04/08/2005			EXAMINER	
ROBERT PLOTKIN C O WOLF GREENFIELD AND SACKS PC FEDERAL RESERVE PLAZA 600 ATLANTIC AVENUE BOSTON, MA 022102211			THAI, TUAN V	
			ART UNIT	PAPER NUMBER
			2186	

DATE MAILED: 04/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/342,453

Applicant(s)

ST. PIERRE ET AL.

Examiner

Tuan V. Thai

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 January 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-11, 13-18, 20-22, 25-28, 30-34 and 36-38 is/are rejected.
- 7) ☒ Claim(s) 6, 12, 19, 24, 29 and 35 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 March 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

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Part III DETAILED ACTION

Response to Amendment

1. This office action is in response to Applicant's communication filed January 10, 2005. This amendment has been entered and carefully considered. Claims 1-39 are again presented for examination.

2. Applicant's arguments with respect to claims 1-5, 7-11, 13-18, 20-22, 25-28, 30-34 and 36-38 have been considered but are not deemed to be persuasive. The rejections are maintained as follow.

Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1-5, 7-11, 13-18, 20-23, 25-28, 30-34 and 36-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's admitted prior art; hereinafter AAPA, in view of

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Saxon (USPN: 5,758,359).

As per claims 1, 7, 13-14, 20, 30-31, 36, 37 and 38; AAPA discloses a computer system 10 including a host computer 16, a storage device 16 for storing client data 16a-16d from the host computer 12, and a computer-readable backup storage medium is taught as backup server 20 for storing backup data copied from the storage device 16 (e.g. figure 1 labeled as prior art; also see specification, page 1, third paragraph bridging page 2, second paragraph); AAPA further discloses apparatus and method for duplicating the backup data stored on the backup storage medium comprising "copying the backup data from the backup storage medium onto at-least one computer-readable duplicate backup storage medium as duplicate backup data" as being equivalent to **media duplication** wherein data from the backup storage medium (backup trail 29) is copied to the duplicate backup storage medium (media duplication trail 31) in a one-to-one correspondence (e.g. see page 4, lines 5-12). AAPA teaches the invention as claimed with one exception of copying/backing-up **only a subset of the backup data** from the at least one backup storage medium onto the duplicate backup storage medium. First of all, partial backup is notorious old and well known in the memory storage art; secondly, as being illustrated by Saxon in the teaching of method and apparatus for performing retroactive backups in a computer system, Saxon discloses partial backup is

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used to minimize the usage of the CPU and is not a time consuming process wherein one a subset of data or files is copied or backup (e.g. see column 1, lines 30-39). Accordingly, it would have been obvious to one having ordinary skill in the art at the time the current invention was made to implement the partial backup as being taught by Saxon for that of AAPA's current invention wherein only a subset of data being backed-up instead of full backup which is known as time-consuming and tends to monopolize the CPU for a lengthy period of time. In doing so, it would reduce the CPU operational time, and allow it to process additional tasks/instructions therefore enhancing system throughput; in addition, it would further reduce bus utilization that is required if full duplication/backup would have been utilized, therefore being advantageous.

As per claims 2, 8 and 15; AAPA clearly discloses that backup data includes work items 16a-16d such as file systems, directories, databases or files (e.g. see specification, page 2, line 1);

As per claim 3-4, 9-10 and 16-17; the further limitation of the duplicate backup storage medium having different types/properties than the backup storage medium is being disclosed as "backup storage media in a backup trail may in the same backup storage device or in a different backup storage device than the duplicate backup storage media in the

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corresponding media duplication trail (e.g. see specification, page 4, first paragraph, lines 13-17), in addition, AAPA further discloses "each of the backup storage trail 29 and the media duplication trail 31 may include backup storage media in any available backup storage device (e.g. page 4, first paragraph, lines 16-17) which is known to includes any of the known storage medium such as magnetic, optical, tape media, flash... etc;

As per claims 5, 11, 18; AAPA discloses the storing in a logical duplication database a record indicating that the subset of the backup data copied which has been copied to the at least one duplicate backup storage medium (e.g. see specification, page 5, second paragraph);

As per claims 21 and 32; Whiting discloses wherein the first work item is stored on a single backup storage medium, wherein the backup data further includes a second work item stored in the single backup storage medium, and wherein the method includes a step of not duplicating the second work item onto the duplicate backup medium is equivalently taught as ONLY those files which have changed since the previous backup are actually read from the volume and stored on the backup storage (e.g. see abstract, column 5, lines 7 et seq.);

As per claims 22 and 33; AAPA discloses that backup data being stored on the backup storage means of disk spaces of different network file server which is known to have different

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properties (e.g. see specification, page 4, first paragraph, lines 13-17);

As per claims 23 and 34; AAPA discloses storing in a logical duplication database a record indicating that the first work item has been copied to the at least one duplicate backup storage means (e.g. see specification, page 5, second paragraph);

);

As per claims 25-28; AAPA discloses the invention as claimed, detailed above with respect to claims 20-23; AAPA however does not particularly disclose a computer-readable medium having of instructions to carry out the steps of claims 20-23 to be implemented on a computer as being claimed in claims 25-28. However, one of ordinary skill in the art would have recognized that computer readable medium (i.e., floppy, cd-rom, etc.) carrying computer-executable instructions for implementing a method, because it would facilitate the transporting and installing of the method on other systems, is generally well-known in the art. For example, a copy of the Microsoft Windows operating system can be found on a cd-rom from which Windows can be installed onto other systems, which is a lot easier than running a long cable or hand typing the software onto another system. The examiner takes Official Notice of this teaching. Therefore, it would have been obvious to put AAPA's program on a computer readable medium, because it would facilitate the

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transporting, installing and implementing of AAPA's program on other systems.

Allowable subject matter

5. Claims 6, 12, 19, 24, 29 and 35 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and intervening claims.

6. As to the remark; (a) the teachings of Saxon simply are irrelevant to the copying of backup data from a backup medium and provides no teaching whatsoever with respect to copying of backup data; Saxon refers to two types of partial backups and neither of these types of partial backups for the creation of backup data has any applicability whatsoever to the process of copying backup data; the teaching in Saxon that some partial backups can be made because some files do not warrant being backed up is simply irrelevant to the backup data duplication process (e.g. see page 3, lines 14 et seq.); (b) the teachings of Saxon would not have motivated one of skill in the art to modify the AAPA in any way; in another words, there is no motivation to combine the AAPA and Saxon to arrive at Applicant's current invention.

With respect to (a); it should be noted that the reference of Saxon being relied upon by the Examiner is solely for the

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concept of partial backup wherein the "copying the backup data from the backup storage medium onto at-least one computer-readable duplicate backup storage medium as duplicate backup data" is taught by AAPA as the *media duplication* wherein data from the backup storage medium (backup trail 29) is copied to the duplicate backup storage medium (media duplication trail 31) in a one-to-one correspondence (e.g. see page 4, lines 5-12). The partial backup is simply a method of backup a portion of data/file from one storage medium to another storage medium which can well be applied to the copying backup information from backup storage medium to another duplicate backup storage medium; Examiner totally disagrees with the Applicant's counsel assertion that "the teaching in Saxon that some partial backups can be made because some files do not warrant being backup is simply irrelevant to the backup data duplication process disclosed by AAPA"; in fact; Saxon clearly discloses any data files can be subjected to partial backup in his invention, and the main reason of the implementation of the "partial backup process" vs. "full backup process" because it would minimize the usage of the CPU and is not a time consuming process wherein one a subset of data or files is copied or backup (e.g. see column 1, lines 30-39).

With respect to (b), "In response to Applicant's argument that there is no suggestion to combine the references, the Examiner recognizes that references cannot be arbitrarily

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combined and that there must be some reason why one skilled in the art would be motivated to make the proposed combination of primary and secondary references. In re Nomiya, 184 USPQ 607 (CCPA 1975). However, there is no requirement that a motivation to make the modification be expressly articulated. The test for combining references is what the combination of disclosures taken as a whole would suggest to one of ordinary skill in the art. In re McLaughlin, 170 USPQ 209 (CCPA 1971). AAPA and Saxon references are evaluated by what they suggest to one versed in the art, rather than by their specific disclosures. In re Bozek, 163 USPQ 545 (CCPA) 1969. In this case, the Saxon reference was used to provide evidence of the well-known concept of partial data backup instead of conventional full or mirror backup for minimizing the usage of the CPU and is not a time consuming process wherein one a subset of data or files is copied or backup. Therefore, the 103 rejection based on incorporating the well-known concept of partial data backup, as evidenced by Saxon, into AAPA system is deemed to be proper.

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 C.F.R. § 1.136(a).

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A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS FINAL ACTION IS SET TO EXPIRE THREE MONTHS FROM THE DATE OF THIS ACTION. IN THE EVENT A FIRST RESPONSE IS FILED WITHIN TWO MONTHS OF THE MAILING DATE OF THIS FINAL ACTION AND THE ADVISORY ACTION IS NOT MAILED UNTIL AFTER THE END OF THE THREE-MONTH SHORTENED STATUTORY PERIOD, THEN THE SHORTENED STATUTORY PERIOD WILL EXPIRE ON THE DATE THE ADVISORY ACTION IS MAILED, AND ANY EXTENSION FEE PURSUANT TO 37 C.F.R. § 1.136(a) WILL BE CALCULATED FROM THE MAILING DATE OF THE ADVISORY ACTION. IN NO EVENT WILL THE STATUTORY PERIOD FOR RESPONSE EXPIRE LATER THAN SIX MONTHS FROM THE DATE OF THIS FINAL ACTION.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan V. Thai whose telephone number is (703) 305-3842. The examiner can normally be reached on from 6:30 A.M. to 4:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mathew M. Kim can be reached on (703)-305-3821. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

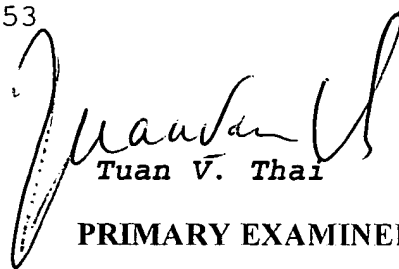
Information regarding the status of an application may be information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TVT/March 27, 2005

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A handwritten signature in black ink, appearing to read 'Tuan V. Thai', is written over a printed name.

Tuan V. Thai

PRIMARY EXAMINER

Group 2100